

MODULE I STANDARD CONDITIONS

Module I of the permit sets forth the standard conditions that are applicable to all hazardous waste management facilities. The regulations applicable to permitting, Parts 260 through 264, 266, 268, 270 and 279, of Title 40, Code of Federal Regulations, have been incorporated by reference into Sections 2 through 7, 9 through 11, and 14, respectively, of Title 33 Code of State Regulations Series 20, Hazardous Waste Management Rule (HWMR).

(NOTE: The regulatory and/or statutory citations in parentheses are incorporated into the permit by reference.)

I-A EFFECT OF PERMIT (40 CFR 270.4, 270.30(G) AND 22-18-8(A) OF W.VA. CODE)

The Permittee is allowed to manage hazardous waste in accordance with the conditions of the West Virginia Hazardous Waste Management Permit (the state portion of the full RCRA Permit). Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly or specifically exempted by law.

Compliance with the permit during its term constitutes compliance, for purposes of enforcement, with the Hazardous Waste Management Act (Article 18, Chapter 22 of the West Virginia Code), (hereinafter, the ACT), except for those requirements not included in the permit which: 1) become effective by statute; or 2) are promulgated under 40 CFR, Part 268, restricting the placement of hazardous waste in, or on the land; or 3) are promulgated under 40 CFR, Part 264, regarding leak detection systems for new, replacement, and lateral expansions of surface impoundment, waste pile, and landfill units which will be implemented through the procedures of 40 CFR 270.42, Class 1 permit modifications; or 4) are promulgated under Subparts AA, BB, or CC of 40 CFR, Part 265, limiting air emissions.

Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought by the U. S. Environmental Protection Agency (US EPA) under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. '9601 et. seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

I-B PERMIT ACTIONS (40 CFR 270.30(F))

This permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR 270.41, 270.42, and 270.43. This permit may also be reviewed and modified by the West Virginia Department of Environmental Protection, Division of Water and Waste Management (DWWM), consistent with 40 CFR 270.41, to include any terms and conditions determined necessary to protect human health and the environment, and to achieve compliance with 270.32(b)(2). The filing of a request for a permit modification, revocation, and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. The Permittee shall not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective.

I-C SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit, to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I-D DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those set forth in the Act, HWMR, and 40 CFR Parts 260 through 264, 266, 268, 270, and 279, which have been incorporated by reference, unless this permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following definitions also apply to this permit.

- D-1 "Director" means the Director of the Division of Water and Waste Management, West Virginia Department of Environmental Protection.
- D-2 "Days" mean except as otherwise provided herein, calendar days;
- D-3 "Hazardous Constituent" means any constituent identified in Appendix VIII of 40 CFR, Part 261, or any constituent identified in Appendix IX of 40 CFR, Part 264;
- D-4 "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.
- D-5 "Secretary" means the Secretary of the West Virginia Department of Environmental Protection.

I-E

FAILURE TO SUBMIT RELEVANT AND/OR ACCURATE INFORMATION

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, DWWM, the Permittee shall notify the Director of such failure within seven (7) calendar days of becoming aware of such deficiency or inaccuracy. The Permittee shall submit the correct or additional information to the Director within thirty (30) days of becoming aware of the deficiency or inaccuracy (40 CFR 270.30(l)(11) and 270.32(b)). Failure to submit the information required in this permit or misrepresentation of any submitted information is grounds for termination of this permit (40 CFR 270.43).

I-F

DUTIES AND REQUIREMENTS

- F-1 Duty to Comply (40 CFR 270.30(a))

The Permittee must comply with all conditions of this permit, except that the Permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 CFR 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- F-2 Duty to Re-apply (40 CFR 270.30(b))

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit.

- F-3 Permit Duration (40 CFR 270.50 and 270.51)

- a. This permit shall be effective for a fixed term not to exceed 10 years. Each permit that includes a land disposal unit shall be reviewed by the Director five (5) years after the date of permit issuance and shall be modified as necessary as provided in 40 CFR 270.41.

- b. This permit and all conditions herein will continue in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see Subpart B of 40 CFR 270) and, through no fault of the Permittee, the Director has not issued a new permit.

F-4 Need to Halt or Reduce Activity Not a Defense (40 CFR 270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

F-5 Duty to Mitigate (40 CFR 270.30(d))

In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impact on human health or the environment.

F-6 Proper Operation and Maintenance (40 CFR 270.30(e))

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F-7 Duty to Provide Information (40 CFR 270.30(h) and 264.74)

The Permittee shall furnish to the Director, DWWM, within a reasonable time designated by the Director, any relevant information which the Director, may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, DWWM, upon request, copies of records required to be kept by this permit.

F-8 Inspection and Entry (40 CFR 270.30(i))

The Permittee shall allow the Director, DWWM, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

F-9 Monitoring and Recordkeeping (40 CFR 270.30(j), 264.73, and 264.74)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by 40 CFR 264.73(b)(9), and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended, by request of the Director, at any time.
- c. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

F-10 Reporting Planned Changes (40 CFR 270.30(l)(1))

The Permittee shall give notice to the Director, DWWM, as soon as possible, of any planned physical alterations or additions to the permitted facility.

Such notification does not waive the Permittee's duty to comply with the following:

Pursuant to Section 8(a) of the Act, no person may construct or modify any facility or site for the treatment, storage, or disposal of hazardous waste without first obtaining a permit. Permitting of these alterations or additions to the facility shall be in accordance with the permit modification procedures of 40 CFR 270.41 or 270.42 that have been incorporated by reference into Section 11 of the HWMR.

F-11 Anticipated Noncompliance (40 CFR 270.30(l)(2))

The Permittee shall give advance notice to the Director, DWWM, of any planned changes in the permitted facility, or activity, which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

F-12 Transfer of Permits (40 CFR 270.30(l)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Director, DWWM, and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR 270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

F-13 Compliance Schedule (40 CFR 270.30(l)(5))

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Director, DWWM, no later than fourteen (14) days following each scheduled date.

F-14 Immediate Reporting (40 CFR 264.56(d)(1) and (2))

Immediate Reporting of Emergencies to Local Authorities and the On-Scene Coordinator or the National Response Center.

- a. Pursuant to 40 CFR 264.56(d)(1) and (2), if the facility's emergency coordinator determines that the facility has had a release, fire, or explosion, which could threaten human health or the environment, outside the facility, he/she must report his/her findings as follows:
 - i. If his/her assessment indicates that evacuation of local areas may be advisable, he/she must immediately notify appropriate local authorities. He/she must be available to help appropriate officials decide whether local areas should be evacuated; and
 - ii. He/she must immediately notify either the government official designated as the On-scene Coordinator for that geographical area, (in the applicable regional contingency plan under 40 CFR Part 1510) or the National Response Center (1-800-424-8802).
- b. The report must include:
 - i. Name and telephone number of the reporter;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time and type of incident (e.g., release, fire);
 - iv. Name and quantity of material(s) involved, to the extent known;
 - v. The extent of injuries, if any; and
 - vi. The possible hazards to human health or the environment, outside the facility.

F-15 Twenty-four (24) hour Reporting (40 CFR 270.30(l)(6) and 270.33)

The Permittee shall report to the Director, DWWWM, any noncompliance, which may endanger human health or the environment. Any such information shall be reported orally as soon as possible, but no later than twenty-four (24) hours from the time the Permittee becomes aware of the circumstances.

This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazard(s) to the environment and human health outside the facility, where this is applicable, and;
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided to the Director, DWWWM, within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected

to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Director, DWWWM, waives the requirement. Upon waiver of the five (5) day requirement, the Permittee shall submit a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

F-16 Other Noncompliance (40 CFR 270.30(l)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported on a quarterly basis. The reports shall contain the information listed in Condition I-F-15.

F-17 Submittal of Reports or Other Information (40 CFR 270.30(l)(7), (8), (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

Director, Division of Water and Waste Management
601-57th Street
Charleston, WV 25304
ATTN: Hazardous Waste Permitting Unit

I-G BIENNIAL REPORTS

Pursuant to 40 CFR 264.75, the Permittee must prepare and submit a single copy of a biennial report to the Director, DWWWM, by March 1, of each even numbered year. The biennial report must be submitted on EPA form 8700-13B. The report must cover facility activities during the previous calendar year and must include:

- G-1 The EPA identification number, name, and address of the facility;
- G-2 The calendar year covered by the report;
- G-3 For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;
- G-4 A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;
- G-5 The method of treatment, storage, or disposal for each hazardous waste;
- G-6 The most recent closure cost estimate under 264.142, and, for disposal facilities, the most recent post-closure cost estimate under 264.144; and,
- G-7 The certification signed by the owner or operator of the facility or his authorized representative.

I-H WASTE MINIMIZATION REPORT

- H-1 Pursuant to 40 CFR 264.75(h), the Permittee must prepare and submit a single copy of a waste minimization report to the Director, DWWWM, by March 1, of each even numbered year. The report shall include a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

- H-2 Annually, Permittee shall submit a copy of the certification maintained under 40 CFR 264.73(b)(9) to the Director of DWWWM. The certification should detail the on going "waste minimization program" in place and should be submitted no later than the first week of April every year.

I-I SIGNATORY REQUIREMENT

- I-1 All reports or other information submitted to or requested by the Director, DWWWM, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR 270.11.
- I-2 Changes to Authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative (40 CFR 270.11(c)).

I-J CONFIDENTIAL INFORMATION

In accordance with Section 11.18 of the HWMR, any information submitted to the Director, Division of Water and Waste Management, pursuant to this permit, may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed in Section 11.19.b. and c. of the HWMR.

If no claim is made at the time of submission, the Division of Water and Waste Management shall make the information available to the public. If a claim is asserted, the information shall be treated in accordance with the procedures in Section 11.18 of the HWMR.

I-K

DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain, at the facility, until closure is completed and certified by an independent registered professional engineer, all items required by 40 CFR 264.73, including the following documents and all amendments, revisions, and modifications to these documents.

- K-1 Waste Analysis Plan, as required by 40 CFR 264.13, and this permit;
- K-2 Operating Record, as required by 40 CFR 264.73, and this permit;

The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

- a. Pursuant to 40 CFR 264.73(b)(1), a description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal, at the facility, in accordance with the instructions contained in Appendix I of 40 CFR 264;
- b. Pursuant to 40 CFR 264.73(b)(2), the location of each hazardous waste within the facility along with the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste managed in the disposal area must be recorded in the operating record. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest. {Comment: See 40 CFR 264.119 for related requirements.}
- c. Records and results of waste analyses performed as specified in 40 CFR 264.13, 264.17, 264.314, 264.341, 264.1034, 264.1063, 264.1083, 268.4(a), and 268.7.

- d. Summary reports and details of all incidents that require implementing the contingency plan as specified in 40 CFR 264.56(j);
 - e. Records and results of inspections as required by 40 CFR 264.15(d) (this data needs to be kept for only three (3) years).
 - f. Monitoring, testing, or analytical data, and corrective action where required by 40 CFR 264, subpart F and 264.19, 264.191, 264.193, 264.195, 264.222, 264.223, 264.226, 264.252-264.254, 264.276, 264.278, 264.280, 264.302- 264.304, 264.309, 264.347, 264.602, 264.1034(c)- 264.1034(f), 264.1035, 264.1063(d)- 264.1063(i), 264.1064, and 264.1082 through 264.1090.
 - g. All closure cost estimates under 40 CFR 264.142 and for disposal facilities, all post-closure cost estimates under 40 CFR 264.144.
 - h. Pursuant to 40 CFR 264.73(b)(9), a certification by the Permittee, no less often than annually, that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that is generated to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal, is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment.
 - i. Records of the quantities, along with date of placement, for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to 40 CFR 268.5, a petition pursuant to 40 CFR 268.6, or a certification under 268.8, and the applicable notice required by a generator under 40 CFR 268.7(a).
 - j. For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8;
 - k. For an off-site land disposal facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator of a treatment facility under 40 CFR 268.7 and 268.8, whichever is applicable; and
 - l. For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 268.8; and
 - m. For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration (if applicable), required by the generator or the owner or operator under 40 CFR 268.7 or 268.8; and
 - n. For an on-site land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under 40 CFR 268.8, whichever is applicable; and
 - o. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR 268.7 or 40 CFR 268.8.
- K-3 Notifications from generators accompanying each incoming shipment of wastes subject to 40 CFR Part 268 Subpart D, that specify treatment standards, as required by 40 CFR 268.7 and this permit;

- K-4 Corrective action reports and records, if any, must be maintained for at least three (3) years after all corrective action activities have been completed.

I-L DISCLOSURE IN DEED

Pursuant to Section 21 of the Act and Section 12 of the HWMR, the Permittee shall make a notation on the deed or lease to the facility property, or on some other instrument that is normally examined during title search, that will, in perpetuity notify any potential purchaser that the land has been used to manage hazardous waste. Such disclosure shall describe the location upon said property, identifying the type and quantity of hazardous waste and the method of storage, treatment, or disposal with respect to such waste.

I-M LAND DISPOSAL REQUIREMENTS

M-1 GENERAL CONDITIONS

- a. The Permittee shall comply with all applicable self-implementing requirements of 40 CFR Part 268, and all applicable land disposal requirements, which become effective by statute.
- b. A mixture of any restricted waste with non-restricted waste(s) is a restricted waste under 40 CFR Part 268.
- c. Except as otherwise provided by 40 CFR Part 268, the Permittee shall not in any way dilute a restricted waste or the residue from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR, Part 268, Subpart D, to circumvent the effective date of a prohibition imposed by 40 CFR 268.3.
- d. Pursuant to 40 CFR 268.7, the Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include these waste codes, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the WVDEP, DWWWM representatives, or their designees, upon request.

M-2 TESTING AND RELATED REQUIREMENTS

- a. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
- b. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.40, the Permittee shall test the wastes or waste treatment residues, or extracts of such residues developed using the test Method 1311 described in US EPA Publication SW 846 and referenced in Appendix II of 40 CFR, Part 261 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the wastes or waste treatment residues or extracts meet the applicable treatment standards of 40 CFR, Part 268 Subpart D. Such testing shall be performed as required by 40 CFR 264.13 and permit condition II-B.
- c. A restricted waste for which a treatment technology is specified under 40 CFR 268.40 and 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved under the procedures set forth in 40 CFR 268.42(b).

- d. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.40, the Permittee shall test the wastes or waste treatment residues (not an extract of such residues) to assure that the wastes or waste treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13 and permit condition II-B.
- e. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7.

M-3 STORAGE PROHIBITIONS

- a. The Permittee shall comply with all applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268 Subpart E.
- b. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:
 - i. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
 - ii. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating records at that facility.
 - iii. The Permittee may store restricted wastes for up to one (1) year unless the WVDEP, DWWM, or its authorized agent, can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.
 - iv. The Permittee may store restricted wastes beyond one (1) year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.
 - v. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within one (1) year of the date when such wastes are first put into storage. Condition I.M-3(iv) above, that allows storage for over one (1) year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

MODULE II
GENERAL FACILITY CONDITIONS

II-A DESIGN AND OPERATION OF FACILITY

The Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste and/or hazardous waste constituents to air, soil, or state waters (including surface and groundwater) which could threaten human health or the environment as required by 40 CFR 264.31.

II-B GENERAL WASTE ANALYSIS

- B-1 The Permittee shall follow the procedures as required by 40 CFR 264.13 and as described in the Waste Analysis Plan, Attachment 1.
- B-2 The Permittee, at a minimum, shall verify the analysis of each generated waste stream as required in 40 CFR 264.13(a)(3) and as part of its quality assurance program, in accordance with the current EPA approved methods of sampling and analysis as outlined in Test Methods for Evaluating Solid Waste, U.S. EPA Publication SW-846, or equivalent methods approved by the Secretary, WVDEP.
- B-3 The Permittee shall maintain calibrated functional instruments, verify the integrity of sampling and analysis by documentations, and perform correct calculations. Throughout all sampling and analytical activities, the Permittee shall use EPA approved quality assurance/quality control (QA/QC), and chain-of-custody procedures.
- B-4 If the Permittee uses a contractor to perform sampling and analysis, the Permittee shall ensure that:
 - a. The laboratories perform analyses according to the current EPA methods outlined in Test Methods for Evaluating Solid Waste, US EPA Publication SW-846 or equivalent methods approved by the Secretary, DEP
 - b. The laboratories participate in a quality assurance/quality control (QA/QC) program equivalent to that which is followed by the State or EPA.
- B-5 For purposes of demonstrating compliance with this permit and the Act, the Permittee shall not use laboratory data generated by a laboratory which is not certified under the West Virginia laboratory certification program as required by 22-1-15 of the W.Va. Code and Title 47, Series 32 Rule promulgated under this statutory provision.

II-C GENERAL INSPECTION REQUIREMENTS

- C-1 The Permittee must inspect the facility for malfunctions and deterioration, operator errors, and discharges, which may be causing or may lead to:
 - a. release of hazardous waste constituents to the environment; or,
 - b. a threat to human health.

The Permittee must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment (40 CFR 264.15(a)).

- C-2 The Permittee must follow a written inspection schedule as outlined in Attachment 2.
- C-3 The Permittee must remedy any deterioration or malfunction of equipment or structures discovered by an inspection as required by 40 CFR 264.15(c).
- a. Where a hazard is imminent or has already occurred, the Permittee must take remedial action immediately.
 - b. The Permittee shall, remedy any deterioration or malfunction of equipment or structure on a schedule, which ensures that the problem does not lead to an environmental or health hazard.
- C-4 The Permittee shall record these inspections and their results in an inspection log (40 CFR 264.15(d)) and the facility operating record as required by permit condition I-K-2.e.

II-D PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the outline in Attachment 3. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).

II-E PREPAREDNESS AND PREVENTION

E-1 Required Equipment

At a minimum, the Permittee shall equip the facility with the equipment as set forth in the contingency plan, Attachment 4, as required by 40 CFR 264.32.

E-2 Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in the previous Permit Condition and in Attachment 3 as necessary to assure its proper operation in time of emergency as required by 40 CFR 264.33. The record of tests and maintenance shall be part of the facility operating record and maintained for three (3) years. (40 CFR 264.73(b)(6)).

E-3 Access to Communications or Alarm System

The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.32.

E-4 Required Aisle Space

At a minimum, the Permittee shall maintain aisle space as required by 40 CFR 264.35 to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.

II-F ARRANGEMENTS WITH LOCAL AUTHORITIES (40 CFR 264.37)

- F-1 The Permittee shall comply with the requirements of 40 CFR 264.37 by making a diligent effort to:
- a. Familiarize emergency response agencies which are likely to respond in an emergency with the location and layout of the facility, chemical and physical properties of hazardous waste managed at the facility and associated hazards, places where facility personnel will normally be working, entrances to and roads inside the facility, and possible evacuation routes as depicted and explained in Attachment 4, and

- b. Familiarize the local ambulance services, fire department, hospitals, and any other local emergency service, with the chemical and physical properties of hazardous waste managed at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

- F-2 When a State or local agency declines to enter into the arrangements set forth in 40 CFR 264.37(b), the Permittee shall document the refusal in the operating record.
- F-3 The Permittee shall, in accordance with 40 CFR 264.53(b), submit a copy of the approved contingency plan, including all amendments, revisions, or modifications to all local police departments, fire departments, hospitals, and local emergency response teams that may be called upon to provide emergency services. The Permittee shall notify such agencies and the local authorities, in writing, of any amendments of, revisions to, or modifications to the contingency plan.

II-G CONTINGENCY PLAN

G-1 Implementation of Plan

The Permittee shall immediately carry out the provisions of the approved contingency plan, as set forth in Attachment 4, and follow the emergency procedures described by 40 CFR 264.56 whenever there is an imminent or actual emergency situation (which includes release of hazardous waste or constituents, a fire, or explosion), which threatens or could threaten human health or the environment.

G-2 Copies of Plan

The Permittee shall comply with the requirements of 40 CFR 264.53 in regards to contingency plan distribution.

G-3 Amendments to Plan

The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR 264.54.

G-4 Emergency Coordinator

Emergency Coordinators have been identified Attachment 4. The Permittee shall comply with the requirements set forth in 40 CFR 264.55 and 264.56 regarding the emergency coordinator.

II-H GENERAL CLOSURE REQUIREMENTS

H-1 Performance Standard

The Permittee shall perform partial and final closure as required by 40 CFR 264.111 and in accordance with the Closure Plan, Attachment 5 to this permit module.

H-2 Amendment to Closure Plan

The Permittee shall amend the Closure Plan in accordance with 40 CFR 264.112(c) whenever necessary.

H-3 Notification of Closure

The Permittee shall submit to the Director a written notification of the partial or final closure in accordance with 40 CFR 264.112(d).

H-4 Schedule and Time Allowed For Closure

- a. Pursuant to 40 CFR 264.112(b)(6), the Permittee has provided a schedule of closure for each hazardous waste management unit and for final closure of the facility in the approved closure plan, as set forth in Attachment 5. For Permittees that use a Trust Fund to establish financial assurance, the schedule must also include an estimate of the expected year of final closure.
- b. Pursuant to 40 CFR 264.113, the Permittee, after receiving the final volume of hazardous waste at a hazardous waste management unit or facility, shall perform one or more of the following within ninety (90) days or an alternate period approved by the Director pursuant to 40 CFR 264.113(a).
 - i. Remove all hazardous waste from the unit or facility.
 - ii. Treat those waste(s), which are permitted in accordance with the permit.
 - iii. Dispose of, on-site, those waste(s) which are permitted in accordance with the permit.
- c. The Permittee shall complete partial and final closure activities in accordance with the approved closure plan and within one hundred-eighty (180) days after receiving the final volume of hazardous wastes at the hazardous waste management unit, or an alternate period contingent on the Director's approval of the demonstration made pursuant to 40 CFR 264.113(b).

H-5 Disposal or Decontamination of Equipment

- a. During partial and final closure, the Permittee must decontaminate and/or dispose of all contaminated equipment, structures, and soils, as required by 40 CFR 264.114 and the approved Closure Plan, as set forth in Attachment 5.
- b. The Permittee shall provide the DWWWM the opportunity to split samples by giving an advance notice, of one week, to the assigned DWWWM inspector, of any sampling, which is to be done under the closure plan.

H-6 Certification of Closure

Within sixty (60) days of completion of each unit closure or final closure of the Facility, the Permittee must submit to the Director, certification both by the Permittee and by an independent registered professional engineer, that the partial or final closure has been performed in accordance with the specifications in the approved Closure Plan and the terms and conditions of this permit as required by 40 CFR 264.115.

II-I COST ESTIMATE FOR CLOSURE AND POST-CLOSURE

I-1 Cost Estimates

- a. Pursuant to 40 CFR 264.142 and 264.144 the Permittee shall have a detailed written estimate, in current dollars, of the cost of closing the facility and providing post-closure care in accordance with the approved closure plan and post-closure plan, Attachment 5.

- b. The estimate must equal the cost of final closure at the point in the facility's life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.
- c. The estimates must be based on the costs to the owner or operator of hiring a third party to close the facility, and to provide post-closure care. A third party is a party who is neither a parent nor a subsidiary of the owner or operator.
- d. The closure cost estimate may not incorporate any salvage value that may be realized with the sale of the hazardous wastes, facility structures or equipment, and/or other assets associated with the facility at the time of partial or final closure.
- e. The Permittee shall comply with the requirements of 40 CFR 264.144 including the requirements to adjust and revise post-closure cost estimates when necessary.

I-2 Annual Adjustment (264.142(b) and 264.144(b))

During the active life of the facility, the Permittee must adjust the cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument used to comply with the requirements of 40 CFR 264.143 and 264.145. If using the financial test or corporate guarantee, the cost estimate must be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to DEP.

I-3 Adjustment for Changed Conditions

The Permittee must revise the cost estimate whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c) and/or post-closure plan as required by 264.144(c).

I-4 Availability

The Permittee must keep at the facility the latest cost estimate as required by 40 CFR 264.142(d) and 264.144(d).

II-J INCAPACITY OF OWNER/OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee must notify the Secretary, Department of Environmental Protection, by certified mail, of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Permittee as debtor, within ten (10) days after commencement of the proceeding, as required by 40 CFR 264.148.

II-K GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

The Permittee shall comply with the requirements of 40 CFR 264.17. Permittee shall follow the procedures for handling ignitable, reactive, and incompatible waste(s) set forth in Attachment 6.

II-L FINANCIAL ASSURANCE REQUIREMENTS

The Permittee shall maintain compliance with 40 CFR 264, Subpart H by providing financial assurance, as required by 40 CFR 264, Subpart H, in at least the amount of the cost estimates required by Permit Condition II-I.

II-M LIABILITY REQUIREMENTS

The Permittee shall comply with the requirements of 40 CFR 264.147 and the documentation requirements of 40 CFR 264.147, including the requirements to have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million dollars per occurrence with an annual aggregate of at least \$2 million, and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

II-N SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14.

II-O REQUIRED NOTICES

The Permittee shall comply with the requirements of 40 CFR 264.12.

II-P MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, and 264.76.

II-Q CONSIDERATIONS UNDER STATE LAW

Q-1 Groundwater Protection Act

The Secretary, Department of Environmental Protection, under the provisions of the Groundwater Protection Act (Article 12, Chapter 22 of the West Virginia Code), has certified the groundwater regulatory program of the Division of Water and Waste Management (DWWWM), Hazardous Waste Management, and thereby authorized DWWWM to be a groundwater regulatory agency for the purposes of Article 12.

a. Annual Fee

The Permittee shall pay the annual groundwater protection fund fee in accordance with the regulations codified as Title 47, Code of State Regulations Series 55, that were promulgated under the Groundwater Protection Act. Pursuant to Section 9(a) of this Act, failure to remit groundwater protection fund fees may result in withdrawal or withholding of groundwater certification and, subject the Permittee to the penalties outlined in 22-12-10 of the West Virginia Code.

b. Groundwater Protection Plan

The regulations, Title 47 Code of State Regulations Series 58, promulgated under the Groundwater Protection Act, establish a series of practices, which must be followed by persons subject to regulations by DWWWM under the Groundwater Protection Act. Pursuant to Section 4.12.3 of 47 CSR 58, the Groundwater Protection Plan (GPP) must be available on site at all times.

II-R AIR EMISSION STANDARDS FOR PROCESS VENTS (40 CFR 264.1030(C))

The Permittee is subject to the requirements of 40 CFR Part 264, Subpart AA. The Permittee shall comply with 264.1032 through 264.1036 and the emission standards approved and enforced by the Department of Environmental Protection, Division of Air Quality (DAQ).

II-S AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS (40 CFR 264.1050(C))

The Permittee is subject to the requirements of 40 CFR Part 264 Subpart BB. The Permittee shall comply with 264.1052 through 264.1065 and the emission standards approved and enforced by the Department of Environmental Protection, Division of Air Quality (DAQ).

II-T AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

The Permittee is subject to the requirements of 40 CFR 264 Subpart CC. The Permittee shall comply with 264.1080 through 264.1090 and the emission standards approved and enforced by the Department of Environmental Protection, Division of Air Quality (DAQ).

II-U FLOODPLAIN STANDARD

In the event of imminent flooding, the Permittee shall comply with the floodplain standard of 40 CFR 264.18(b) by implementing the provisions of the Contingency Plan, Attachment 4, to secure or remove hazardous waste from these portions of the facility which are located in the floodplain to prevent washout of hazardous waste.

MODULE X CORRECTIVE ACTION

The RCRA Corrective Action Program (CAP) requires investigation and cleanup of releases of hazardous constituents and hazardous waste that pose an unacceptable threat at current and former RCRA hazardous waste treatment, storage, and disposal (TSD) facilities. The objectives of the RCRA CAP is to evaluate the nature and extent of the releases of hazardous waste constituents; to evaluate facility characteristics; and to identify, develop, and implement and appropriate corrective measure or measures to protect human health and environment.

X-A GENERAL CORRECTIVE ACTION REQUIREMENTS (40 CFR 264.100)

The Permittee is required to establish a corrective program under this subpart must, at a minimum, discharge the following responsibilities:

- A-1 Ensure that regulated unit complies with the ground-water protection standard.
- A-2 Implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place.
- A-3 Begin corrective action within a reasonable time-period after the groundwater protection standard is exceeded.
- A-4 Implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program.
- A-5 Conduct a corrective action program to remove or treat in place any hazardous constituents that exceed concentration limits in groundwater.
- A-6 The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied.
- A-7 Corrective action measures under this paragraph may be terminated once the concentration of hazardous constituents is reduced to levels below their respective concentration limits.
- A-8 Ensure that the groundwater protection standard is not exceeded.
- A-9 Continue the corrective action for as long as necessary to achieve compliance with the groundwater protection standard.

X-B COMPONENTS OF CORRECTIVE ACTION PROGRAM

B-1 The following components are necessary to ensure a complete corrective action program and the detail in each of these steps will vary depending on the facility and its complexity.

- a. Locate the source of contamination.
- b.** Determine the extent of contamination.

- c. Determine actual and potential threats from the contamination to human health and the environment in both the short and long term.
- d. Implement stabilization measures to control the source of contamination.
- e. Evaluate the overall integrity of containment structures intended for long-term containment.
- f. Monitor the performance of any interim or final corrective measure(s) to ensure that human health and the environment are being protected.

X-C RCRA CORRECTIVE ACTION PERMIT

- C-1 In December 1990, EPA issued a RCRA corrective action permit (RCRA CAP) to the Permittee to conduct site cleanup. In 1997, the RCRA CAP was modified to incorporate interim measures to address areas of contamination. The following requirements of the RCRA CAP have been completed:
- a. A RCRA Facility Investigation (RFI) of the North Inactive Site was conducted between January and June 1992 to determine if any areas warranted cleanup action.
 - b. A Verification Investigation (VI) for the South Inactive Site, Waste Water Treatment System, Drum Staging Area, #3 Sludge Pond, and BTEX Area.
 - c. Based on the recommendations in the VI, an RFI of the South Inactive Site, Waste Water Treatment System, #3 Sludge Pond, and the BTEX Area conducted in 1994
 - d. Interim measures were implemented at various Solid Waste Management Units (SWMUs).

X-D INTERIM MEASURES

- D-1 All interim measures were completed after discussions with and approval from EPA.
- a. North Inactive Site
 - i. Interim measures implemented during the summer and fall of 1992 consisted of construction to improve run-on/run-off control and minimize surface water infiltration.
 - ii. Ongoing periodic inspections.
 - iii. Construction of a 10-acre earthen cap with a minimum of 18 inches of compacted soil fill material sloped at 2% to 5%.
 - iv. A V-shaped diversion ditch lined with 18 inches of grouted riprap in potential high erosion areas was constructed along the east side of the North Inactive Site to intercept surface water from the wooded hillside on the east and divert it away from the disposal area.
 - v. Approximately 400 feet of Sugarcamp Run was upgraded to stabilize the bank and prevent erosion along the edge of the North Inactive Site. The upgrade consisted of widening and regrading the section to form a uniform trapezoidal channel that was lined with 18 inches of grouted riprap.
 - vi. New fencing was placed along the east, southeast, and northeast sections of the North Inactive Site.
 - vii. Semiannual inspections of the earthen cap, ditches, fencing, and the Sugarcamp Run stabilized banks to identify maintenance needs.

viii. Semiannual groundwater monitoring of the area around the North Inactive Site.

- ix. A groundwater recovery well was installed in the center of the production area in June 1991 to remediate groundwater impacted by the management of acidic wastes on-site. In December 1991, the well began operation, pumping at 90 to 100 gallon per minute (gpm). The recovered water is sent to the WWTS's dewatering unit for use as spray water in the belt filterpress.
- x. The results of a 1994 hydrogeologic study at the Facility indicated that the existing recovery well is adequate to intercept contaminants from the North Inactive Site and protect off-site receptors.

b. South Inactive Waste Site

- i. Quarterly groundwater sampling of the five monitoring wells installed during the RFI was implemented pursuant to the 1997 CAP Modification. In addition, the earthen cover is inspected during monitoring events to identify potential erosion areas and maintenance needs.

c. WWTS

- i. The two surface impoundments, although currently active, were identified as SWMUs because of suspected leakage through the primary liner. Therefore, daily monitoring of the leakage rate of the surface impoundments to determine if the monthly rate exceeded certain leakage rates was included in the CAP. Even though it was later determined that the suspected leakage was actually rainwater infiltration, this requirement of the CAP was not modified and monitoring continues.
- ii. The UNOX™ Reactors are inspected every two years, the primary clarifiers are inspected annually, and the terminal manhole/neutralization pit and portions of the main process sewer are inspected every two or three years during plant wide electrical shutdown.

X-E SCOPE OF CORRECTIVE ACTION

- E-1 Data for the Drum Storage Areas, Copper Shanty, and the sediments to Sugar Creek Run supports that no further investigation and/or remediation is warranted. Any constituents present were below action levels or appear to be naturally occurring.
- E-2 The SWMUs covered by this corrective action are the North Inactive Site, South Inactive Site, Waste Water Treatment System, and the BTEX Area.

X-F PROPOSED CORRECTIVE MEASURES

- F-1 The proposed correction action is to continue the operation of the current groundwater recovery system at the facility.
- F-2 In addition, inspections and groundwater monitoring will continue on a routine schedule.

X-G FINAL REMEDY

- G-1 The Final Decision was issued by the United States Environmental Protection Agency (EPA) under the authority of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. § 6901 et seq., and EPA regulations at 40 C.F.R. Parts 260-271 and Part 124.

G-2 Consistent with EPA's February 2003 document Final Guidance on Completion of Corrective Action Activities at RCRA Facilities (reference 68 FR 8757), EPA is making a determination of "Corrective Action Complete with Controls" for the MPM Silicones, LLC site. The guidance recommends that EPA make this determination where the full set of corrective measures has been implemented and all that remains is performance of required operation and maintenance and monitoring actions; and/or compliance with and maintenance of any institutional controls. The final remedy for the MPM Silicones site meets these objectives and is protective of human health and the environment.

G-3 The final remedy for the MPM Silicones site is as follows:

a. Site Wide

- i. The surface water, sediments, and soils were addressed during past environmental investigations conducted at the Facility. These media were remediated as necessary through interim measures. As a result, no further action is proposed for surface water, sediment, and soil.
- ii. Institutional controls are to be implemented at the entire Facility to prohibit the use of groundwater as a potable source, to protect the integrity of the remedy, and to prevent exposure to contaminants that are still present at the Facility. These institutional controls will remain in place until EPA or WVDEP has determined that the groundwater has been remediated to drinking water standards.

b. North Inactive Site

- i. An earthen cap and a surface water diversion ditch were constructed to limit the amount of surface water runoff to Sugarcamp Run and to minimize transport of contaminants to groundwater. Institutional controls are to be implemented at the NORTH INACTIVE SITE to prevent disturbance of the earthen cap, to protect the integrity of the remedy, and to prevent exposure to contaminants that are still present at the Facility. These institutional controls will remain in place in perpetuity, and may include title notices and land use restrictions through easements and covenants.
- ii. Additionally, continued inspection of the NORTH INACTIVE SITE is proposed on the schedule provided below. Deficiencies will be corrected in a timely manner, depending on the nature of the problem. However, in no case will the correction take more than thirty days. If more than thirty days is needed, the Facility will contact WVDEP and outline a plan of action.

Inspection Schedule

Earthen Cover	Semiannually and after a heavy rainfall
Diversion Ditches	Semiannually and after a heavy rainfall
Sugarcamp Run Banks	Semiannually and after a heavy rainfall
Monitoring Wells	Each sampling event
Brush and Weed Control	Mow annually
Reseeding	As needed

- iii. A heavy rainfall is defined as 3" or more of rain accumulation in a 24-hour period.
- iv. The monitoring wells NF-1 to NF-9 will be sampled semiannually. If no analytes are detected at concentrations greater than their respective MCL for four (4) consecutive events, the sampling frequency will be reduced to annually. If any analyte is detected at concentrations greater than its respective MCL, the sampling frequency will revert to semiannually.

1. The proposed analyte list is as follows:

- Chlorobenzene
- Benzene
- Toluene
- 1,1-Dichloroethane
- Dichloroethylene (cis-1,2)
- Dichloroethylene (trans-1,2)

c. South Inactive Waste Site

- i. Continue monitoring the groundwater and the ground cover.
- ii. The monitoring wells installed during the RFI (5701, 5702, 5703, 5704, and 5705) will be sampled quarterly. If no analytes are detected at concentrations greater than their respective MCL for four (4) consecutive quarters, the sampling frequency will be reduced to annually. If any analyte is detected at concentrations greater than its respective MCL, the sampling frequency will revert to quarterly.

1. The proposed analyte list is as follows:

- Benzene
- Acrylonitrile
- Chlorobenzene
- Methyl Chloride
- Toluene
- Ethylbenzene
- Xylenes
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1,1-Trichloroethane
- Dichloroethylene (cis-1,2)
- Dichloroethylene (trans-1,2)

- iii. MW-2701 will be added to the groundwater-sampling program for the SIS to monitor migration toward the Ohio River. If any of the above compounds is detected in MW-2701 above its respective MCL, MW-2701 will be resampled within 30 days. If any of the above constituents is still present in MW-2701 above its respective MCL, WVDEP will be notified within seven (7) days. The Ranney Wells No.3 and No.4 will capture the migrating groundwater to send it back to the process.
- iv. If the Ranney Wells are permanently taken out of service, the Facility will notify WVDEP of the action no less than seven (7) days prior to shutdown and will submit to WVDEP, within 30 days of the shutdown, a plan that addresses the development of an alternative source control technique. Upon approval by WVDEP, the Facility will implement the alternative source control plan.
- v. The cover over the existing disposal areas will be inspected on the same frequency as the groundwater sampling. Inspection will include checking for erosion damage and ponding. The location and severity of any noted erosion, along with the corrective action to be taken to address the erosion, will be recorded on an inspection form. Implementation of corrective actions will begin within 30 days of the inspection that documents erosion or ponding on the cover. Each case of erosion or ponding will be evaluated on an individual basis as to urgency and type of repair needed.

d. Waste Water Treatment System

- i. The surveys and inspections of the main trunk of the process sewer and the concrete tanks have not identified major breaches or releases to date. Continuation of the current inspection frequency is proposed to ensure the WWTS remains structurally sound. Any deficiencies found will be repaired in a timely manner based on the severity of the problem, but will in no case exceed thirty days. If more than thirty days will be required to correct a problem, WVDEP will be notified as to the nature of the problem and the estimated time needed for repair.

Inspection Schedule

UNOX Reactors	Every 2 years
Primary Clarifiers	Annually
Terminal Manhole/ Neutralization Pit	During plant wide electrical shutdown
Process Sewer	During plant wide electrical shutdown in rotating 1000' sections

- ii. In addition, the leak rate of the two surface impoundments will be monitored for the life of the unit per the following program. The CAP currently defines an action leakage rate at 20 gallons per day (gpd) and a rapid and extremely large leakage rate at 2,500 gpd. When the average daily leakage rate is equal to or greater than 20 gpd but less than 2,500 gpd to either of two leak collection sumps, the CAP requires that the Facility meet certain requirements, including, but not limited to, notifying EPA and the State, sampling, performing quality determination, and, if necessary, submitting a Response Action Plan for EPA's approval. These actions are also required when the average daily leakage rate is equal to or greater than 2,500 gpd; in these cases the Response Action Plan is always required under the terms of the CAP, and EPA may require that the Facility terminate the receipt of waste and empty the unit.
- iii. The average daily leakage rate requirements of the CAP will be modified to a single action leakage rate of 750 gpd for each surface impoundment. The Facility will convert the weekly flow rate from the monitoring data to an average daily flow rate for each sump. The following Facility requirements are proposed:
 1. The Facility will monitor for and record on a daily basis the presence of liquids in the leak detection system removal sump.
 2. The Facility will analyze the daily monitoring data on a weekly basis to determine if the average leakage rate over the preceding one-month period exceeds the action leakage of 750 gpd to either of the two leak collection sumps of the surface impoundments.
 3. When the average daily leakage rate is equal to or greater than 750 gpd, the Facility must:
 - a. Within seven (7) days of making the determination, notify the WVDEP that the rate was exceeded.
 - b. Immediately sample the leakage in the collection sump to determine its quality. Compare the leakage quality to health-based standards (MCLs, EPA Region III RBCs, and WVDEP Standards) and provide the results to WVDEP within thirty (30) days.
 - c. Discuss with WVDEP whether waste receipt should cease or be curtailed,

whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed. If the concentration of hazardous constituents in the leakage exceeds the health-based standards, and WVDEP determines that a threat to human health and the environment exists, WVDEP may require termination of receipt of waste and emptying the unit.

- d. Determine with WVDEP any other short-term and longer-term actions to be taken to mitigate or stop any leaks.
- e. Within 30 days after the notification that the action leakage rate has been exceeded, submit to WVDEP information about the leak (e.g., the location, size, and cause of the leak), the results of the above analyses, and the results of the actions taken to date. Additionally, the Facility must, at that time, submit to WVDEP for their approval, a proposal for additional actions planned.
- f. If the action leakage rate continues to exceed 750 gpd monthly thereafter, the Facility must submit a report summarizing the results of any remedial actions taken and a proposal for actions planned to the WVDEP for approval.
- g. Within 30 days of approval of proposed actions by WVDEP, the Facility shall initiate implementation of those actions.

e. No. 3 Sludge Pond and BTEX Area

- v. A Corrective Measures Survey and a Comprehensive Groundwater Study were conducted in 1994. The studies confirmed that the existing groundwater recovery well installed in 1991 effectively captures groundwater from the NORTH INACTIVE SITE, the No.3 Sludge Pond, and the BTEX Area. The proposed remedy is to continue operating the recovery well and monitor groundwater contaminants through routine sampling.
- vi. Groundwater elevation data will be collected quarterly along with the river level. The groundwater flow direction will be evaluated yearly to verify that contaminants from the North Inactive Site, No.3 Sludge Pond, and BTEX Area are continuing to be captured by the recovery well (4315).
- vii. MW-20 will be sampled quarterly for benzene, chlorobenzene, cis-1,2-Dichloroethylene, and trans-1,2-Dichloroethylene. If any of these compounds is detected in MW-20 above its respective MCL, MW-20 will be resampled. If any of the above constituents is still present in MW-20 above its respective MCL, MW-3203 will be added to the quarterly monitoring program for the same parameters as MW-20 and the pumping rate of the recovery well may be increased to extend the capture zone.
- viii. Should any of the indicator parameters be detected in MW-3203 at levels above its respective MCL, the well will be re-sampled within 30 days. If the second sampling confirms the presence of any indicator parameter in this well above its respective MCL, WVDEP will be notified within seven (7) days. The Facility will submit to WVDEP, within 30 days of the sampling that confirms the presence of an indicator parameter above its MCL, a plan that addresses the development of an alternative source control technique. Upon approval by WVDEP, the Facility will implement the alternative source control plan.

X-H REPORTING

- H-1 The Permittee will submit to the WVDEP bi-monthly corrective action updates, in letter format, detailing all corrective action activities during the two-month reporting period.
- a. Each bi-monthly update must contain the following information:
1. brief introduction;
 2. description of work completed during the reporting period;
 3. summary of findings;
 4. changes made during the reporting period;
 5. problems encountered and actions taken to rectify problems;
 6. changes in personnel; and,
 7. projected work for the next reporting period,
- H-2 The Permittee will submit to the WVDEP an annual corrective action report within thirty-days of the submittal of the sixth bi-monthly update, with the reporting period ending December 31st of a given year.
- a. Each annual report must contain the following information:
1. introduction;
 2. description of all work completed during the year;
 3. analytical data from the four quarterly ground water sampling events;
 4. summary of all changes made during the year;
 5. summary of all problems encountered during the year and actions taken to rectify problems;
 6. projected work for the next year,
- b. One copy of annual report will be to:

Talal Fathallah
Hazardous Waste Permitting Unit
WVDEP-DWWW
601 57th Street SE
Charleston, WV 25304

X-I QUALITY ASSURANCE

- I-1 The Permittee shall ensure that laboratories used by the them for analyses perform such analyses according to the EPA methods included in "Test Methods for Evaluating Solid Waste" (SW-846, November 1986) or other methods deemed satisfactory to WVDEP. If methods other than EPA methods are to be used, the Permittee shall submit all analytical protocols to be used for analyses to the Director for approval at least thirty-calendar days prior to the commencement of analyses and shall obtain the Director's approval prior to the use of such analytical protocols.

- I-2 The Permittee shall ensure that laboratories used by them for analyses participate in a quality assurance/quality control program equivalent to that, which is followed by EPA. As part of such program, and upon request by the Director, such laboratories shall perform analyses of the appropriate number of samples provided by the Director to demonstrate the quality of the analytical data.
- I-3 Inform the Director at least fourteen (14) calendar days in advance regarding which laboratory will be used by the Permittee to conduct laboratory analyses and ensure that WVDEP personnel and WVDEP authorized representatives have reasonable access to the laboratories and personnel used for analyses.

X-J SAMPLING AND DATA DOCUMENT AVAILABILITY

- J-1 The Permittee shall submit to the Director the results of all sampling and/or tests or other data generated by, or on behalf of, the Permittee in accordance with the requirement of the Permit.
- J-2 The Permittee shall notify the WVDEP at least fourteen (14) calendar days in advance of any field activities, including but not limited to, well drilling, installation of equipment, or sampling. At the request of WVDEP, the Permittee shall provide or allow WVDEP or its authorized representative to take split or duplicate samples of all samples collected by the Permittee pursuant to this Permit. At the request of the Permittee, WVDEP shall provide the Permittee with a portion of each sample taken equal in volume or weight to the portion retained by WVDEP. Nothing in this Permit shall limit or otherwise affect WVDEP's authority to collect samples pursuant to applicable law, including, but not limited to, RCRA and CERCLA.

X-K ACCESS

- K-1 The Permittee shall use its best efforts, as defined below, to obtain site access agreements from the present owner(s) and or lessees, as appropriate, of such property within four (4) weeks after receipt of notice of the Director's approval of any scope of work or work plan which require work on property which is not owned or controlled by the Permittee. "Best efforts" as used in this paragraph shall include at a minimum, but shall not be limited to, sending a certified letter to the present owners and/or lessees, as appropriate, of such property requesting access agreements to allow the Permittee and WVDEP and their authorized representatives to enter such property at all reasonable times.
- K-2 In the event that access agreements are not obtained, the Permittee shall immediately notify the Director in writing indicating all efforts made to obtain such agreements.

X-L CORRECTIVE ACTION COMPLETE

- L-1 At any time during the corrective action activities, the Permittee can submit documentation in support of corrective action complete in accordance with EPA's *Final Guidance on Completion of Corrective Action Activities at RCRA Facilities* (February 13, 2003).

ATTACHMENT 12 – CONTINGENT CORRECTIVE ACTION PLAN

Contingent Corrective Action Plans

Below are generally outlined actions that would follow detection of a significant increase in groundwater monitoring parameters and/or the subsequent detection of hazardous constituents at the Point of Compliance in any other areas of the site.

Environmental Protection

Upon finding hazardous constituents in the groundwater, the first action would be to identify the source of contamination and isolate, repair, or eliminate it if possible. The EP Area has several land storage, treatment, and disposal units that are either still in service or closed. The identity of groundwater constituents may indicate which land units are likely sources. Additional analyses may yield useful evidence.

Groundwater in the EP Area flows generally to the south. The Sistersville Plant presently has several groundwater monitoring wells installed downgradient of the EP Area and its Point of Compliance wells. To determine the extent and direction of constituent flow, groundwater would be sampled from appropriate wells located downgradient and crossgradient. For example, if any hazardous constituents were found in EP Area Well 11A, we would likely sample wells such as 2303 and 2201. If hazardous constituents were found in EP Area Well 21, we would likely sample wells such as 26 and 27.

The Sistersville Plant would seek hydrogeologic consultation from sources either internal or external to the corporation. During due diligence in 2003, the Sistersville plant installed ten (10) additional monitoring wells. The locations of these wells are depicted in Drawing 1. Sampling of these wells will be considered as necessary to define the extent of contamination.

Once the extent of the contamination has been defined, Corrective Action, if necessary, would most likely be to pump groundwater from the affected area and treat it appropriately. Low levels of organic constituents, most metals, and acidic or basic constituents could be effectively treated in the plant's wastewater treatment unit. As can be seen in the groundwater contour maps and as concluded in the *Comprehensive Hydrogeologic Study*, any contamination detected in the EP Area would be captured by the groundwater recovery well. The groundwater recovery well ultimately discharges into the wastewater treatment system, where it is further treated.

No. 1 Landfill

Upon finding hazardous constituents in the groundwater, the first action would be to identify the source of contamination and isolate, repair, or eliminate it, if possible. Because the No. 1 Landfill is inactive and closed, we have a few options for fixing leakage, should it occur. However, the Sistersville Plant would seek hydrogeologic consultation from sources either internal or external to the corporation to evaluate what should be done.

No true aquifer has been identified in the vicinity of the landfills. Rather, groundwater is believed to flow in the general direction of the axis of the Sugar Camp Run valley. If hazardous constituents were found in the wells located along the side of the landfill (Wells 33 and 34), we would examine the wells located along the base of the dam, which would include two wells not in the groundwater monitoring network (Wells D & R) plus the four which are in the network (Wells S, 35, 44, and 45). Most likely, groundwater flows from the area of these higher elevation wells to the lower ones. Should contamination be found in the higher wells and not in the lower wells (i.e. to the north by northwest), either the contaminants have not yet gone that far or the flow path is further to the west.

In this case, we would use the groundwater monitoring wells installed to the west of the No. 1 Landfill, down in the plant proper area (Wells 5401 and 5501). We would analyze groundwater from these wells and determine groundwater elevations/contours to determine groundwater flow direction from the No. 1

Landfill into the Plant area.

Should contamination be found in the lower wells and not in the higher wells, again Wells 5401 and 5501 would be examined. If necessary, the Sistersville Plant would install additional wells (or well clusters) downgradient of the contaminated well(s), between the No. 1 Landfill and the Plant area. Groundwater elevations and quality would be determined as we have in the past, to further define the extent of contamination.

Once the extent of contamination is determined, design data would need to be determined for a potential groundwater recovery system. As the area is quite heterogeneous, groundwater flow is highly locally site-specific. Pumping tests would likely be required to determine whether pump-and-treat would be a viable option here.

If groundwater recovery wells appear likely to be ineffective, alternative of supplemental systems may be necessary. For example, a recovery trench might be practical and effective for collecting groundwater. The water could either be treated in the Plant's wastewater treatment unit or a separate system (e.g. carbon absorption) might be preferable.

If supplemental systems are deemed necessary, the Sistersville Plant would apply for a permit modification.

No. 2 Landfill

Upon finding hazardous constituents in the groundwater, the first action would be to identify the source of contamination and isolate, repair, or eliminate it, if possible. In addition to the groundwater monitoring wells discussed below, other diagnostic tools are available for use at the No. 2 Landfill as needed:

- Slope indicators are used to verify that the dam has remained stable.
- Piezometers are installed in the dam to detect hydrostatic pressure in the dam.
- We can visually inspect the inside wall of the landfill to determine the integrity of the liners.
- We can sample and analyze water in the landfill underdrain and overdrain, looking for similarities and contrasts between constituents in that water and in the monitoring wells.

The Sistersville Plant would seek hydrogeologic consultation from sources either internal or external to the Corporation. With information such as that above plus other investigations, the plant would evaluate the possibility of correcting any leak from the landfill.

Hydrogeologic conditions at the No. 2 Landfill are similar to those at the No.1 Landfill. Groundwater flow is primarily through cracks in the bedrock and generally flows downslope toward Sugar Camp Run. The single well located upslope of the dam is Well 100A.

Several wells are installed at the bottom and side of the dam. If contamination is found in any of the relatively upslope or upgradient wells, we will examine the others downslope for clues to contaminant travel. If contamination is found in a well which is relatively downslope or downgradient among this set of wells, we would need additional wells or clusters to determine the extent and direction of contaminant flow. We will also examine the wells at the eastern edge of the plant (5401 and 5501). However, they are likely too far from the landfill to be of any use.

Analogous to the No.1 Landfill, once the extent of contamination is determined, design data would need to be determined for a potential groundwater recovery system. As the area is quite heterogeneous, groundwater flow is highly locally site-specific. Pumping tests would likely be required to determine whether pump-and-treat would be a viable option here.

If groundwater recovery wells appear likely to be ineffective, alternative or supplemental systems may be necessary. For example, a recovery trench might be practical and effective for collecting groundwater. The water could either be treated in the wastewater treatment system or a separate system (e.g. carbon absorption) might be preferable.

If supplemental systems are deemed necessary, the Sistersville Plant would apply for a permit modification.

Zero Slope Criterion

The zero slope criteria is met when the slope of the plot of a monitoring parameter versus time is deemed to be zero, per the following:

- 1) The data from four consecutive sampling events will be examined on a well-by-well basis, each monitoring parameter being plotted versus time.
- 2) If the data are of linear form, then the least-squares linear regression will be fitted to the data. The slope of the regression line will be the estimated slope.
- 3) If the data are on non-linear form, then the least-squares exponential curve will be fitted to the data. The estimated slope will be the first derivative of the curve at a value in time half way between the two most recent sample points.
- 4) The estimated slope will be deemed to be zero if:
 - a. That slope is less (or greater for pH) than or equal to zero or the yearly change of the parameter is less than the average overall precision of the analytical method(s) used and as described in paragraph 5 below; and
 - b. The data for four consecutive sampling events are lower than the maximum (or greater than the minimum for pH) during all previous monitoring, since commencement of corrective action.
- 5) The average overall precision for each parameter shall be calculated using generally accepted methods for estimating analytical procedure quality control and precision.